## TABLE OF CONTENTS

*Volume 57*

### ARTICLES


BYUN, DAEWON W. / Determination of Similarity Functions of the Resistance Laws for the Planetary Boundary Layer Using Surface-Layer Similarity Function 17

CHEUNG, TAK KEE / Sodar Observations of the Stable Lower Atmospheric Boundary Layer at Barrow, Alaska 251

ERISMAN, JAN-WILLEM and JAN DUYZER / A Micrometeorological Investigation of Surface Exchange Parameters over Heathland 115

GREEN, A. E., M. J. JUDD, J. K. McANENEY, M. S. ASTILL, and P. T. PRENDERGAST / A Rapid-Response 2-D Drag Anemometer for Atmospheric Turbulence Measurements 1

HADFIELD, M. G., W. R. COTTON, and R. A. PIELKE / Large-Eddy Simulations of Thermally Forced Circulations in the Convective Boundary Layer. Part I: A Small-Scale Circulation with Zero Wind 79

HSU, WU-RON and WEN-YIH SUN / Numerical Study of Mesoscale Cellular Convection 167

KUSUMA, G. R., SETHU RAMAN, and A. PRABHU / Boundary-Layer Heights over the Monsoon Trough Region during Active and Break Phases 129

LLOYD, C. R., A. D. CULF, A. J. DOLMAN, and J. H. C. GASH / Estimates of Sensible Heat Flux from Observations of Temperature Fluctuations 311

MENGELKAMP, HEINZ-THEO / Boundary Layer Structure over an Inhomogeneous Surface: Simulation with a Non-Hydrostatic Mesoscale Model 323

PASRICHA, P. K., R. SINGH, S. K. SARKAR, H. N. DUTTA, B. M. REDDY, and P. K. DAS / Characteristics of Atmospheric Turbulence in the Surface Layer over Antarctica 207

SAÏD, FRÉDÉRIQUE and AIMÉ DRUILHET / Experimental Study of the Atmospheric Marine Boundary Layer from In-Situ Aircraft Measurements (TOSCANE-T Campaign): Variability of Boundary Conditions and Eddy Flux Parameterization 219

SMEDMAN, ANN-SOFI / Occurrence of Roll Circulations in a Shallow Boundary Layer 343

TSUKAMOTO, OSAMU, EIJI OHTAKI, YOSHIHARU IWATANI, and YASUSHI MITSUTA / Stability Dependence of the Drag and Bulk Transfer Coefficients over a Coastal Sea Surface 359

WAI, MICKEY MAN-KUI / The Breakup of Marine Boundary-Layer Clouds over an Inhomogeneous Sea Surface Temperature Field 139

YEE, EUGENE / Application of Nonlinear Dynamical Systems Analysis to Conditionally Sampled Concentration Fluctuations of a Passive Scalar in the Atmospheric Boundary Layer 49

YOKOI, TAKEHISA / Estimation of Sensible Heat Flux by a Hybrid Method of Temperature Profile and Light – Beam Deflection 377

## CORRESPONDENCE

HALLDIN, SVEN / Comments on 'Correction of Errors Associated with Measurement of Net All-Wave Radiation with Double-Domed Radiometers' by Oliver and Wright (1990) 195

## RESEARCH NOTES

BRÜMMER, BURGHARD / Wind Shear at Tilted Inversions 295
HOINKA, KLAUS P. / On Looming during Alpine Foehn 289
KAIMAL, J. C. and L. KRISTENSEN / Time Series Tapering for Short Data Samples 187
MELAS, DIMITRIOS / Using a Simple Resistance Law to Estimate Friction Velocity from Sodar Measurements 275
PRICE, JONATHAN S. / Evaporation from a Blanket Bog in a Foggy Coastal Environment 391
ZOUMAKIS, N. M. and A. G. KÊLESSIS / The Dependence of the Bulk Richardson Number on Stability in the Surface Layer 407

Announcement 205

Announcement and Call for Papers 309

Volume Contents 415

Author Index 417

Subject Index 419